

# **SYSTEMS ENGINEERING PLAN (SEP)**

## **PREPARATION GUIDE**



*“Systems Engineering for Mission Success”*

**VERSION 1.02**

**FEBRUARY 10, 2006**

## TABLE OF CONTENTS

Table of Figures .....	3
1.0 Purpose of the Guide.....	4
2.0 General Guidelines and Submittal Instructions .....	4
2.1 General Guidelines.....	4
2.2 Submittal and Approval Instructions .....	6
3.0 Suggested Format and Specific Preparation Guidelines .....	6
3.1 Title and Coordination Pages.....	6
3.2 Table of Contents.....	8
3.3 Introduction.....	10
3.3.1 Program Description and Applicable Documents.....	10
3.3.2 Program Technical Status as of Date of the SEP .....	10
3.3.3 Approach for SEP Updates .....	10
3.4 Systems Engineering Application to Life Cycle Phases.....	10
3.4.1 System Capabilities, Requirements, and Design Considerations .....	11
3.4.2 Systems Engineering Organizational Integration and Technical Authority .....	11
3.4.3 Systems Engineering Process .....	12
3.4.4 Technical Management and Control.....	14
3.4.5 Integration with Overall Program Management Control Efforts .....	15
Appendix A. Focus Areas for Technical Planning .....	17
SEP Focus Areas for Technical Planning – Concept Refinement/Technology Development .....	17
SEP Focus Areas for Technical Planning in SDD/Production and Deployment.....	21
SEP Focus Areas for Technical Planning in Sustainment .....	25
Appendix B. Applicable References.....	29
Appendix C. Acronyms .....	30

## TABLE OF FIGURES

Figure 1 Preferred SEP Title Page .....	7
Figure 2 Preferred SEP Coordination Page .....	8
Figure 3 Suggested SEP Format .....	9

## 1.0 Purpose of the Guide

This document guides program teams in generating their program's Systems Engineering Plan (SEP) regardless of the acquisition category (ACAT) level of the program. This Guide provides an approach for organizing, compiling, and writing a SEP. It describes the key information to include in a SEP; it is not a tutorial on how to accomplish the technical activities discussed in the Plan. The SEP is a "living" document that captures a program's current and evolving systems engineering strategy and its relationship with the overall program management effort. The SEP purpose is to guide all technical aspects of the program. It should be established early in the Concept Refinement phase, updated continually, and disseminated to the relevant team members. The level of fidelity and emphasis will evolve as the program progresses through its life cycle.

The Guide will assist the program team in meeting the policy directives of the [February 20, 2004, USD\(AT&L\) Memorandum, "Policy for Systems Engineering in DoD,"](#) [October 22, 2004, USD\(AT&L\) Memorandum, "Policy Addendum for Systems Engineering,"](#) and [March 30, 2004, OUSD\(AT&L\) Memorandum, "Implementing Systems Engineering Plans in DoD—Interim Guidance,"](#) September 23, 2004, USD (AT&L) Memorandum, "Defense Acquisition System Safety." It contains general guidance, submittal instructions, and specific preparation guidelines, including a preferred format for a SEP.

The office of primary responsibility (OPR) for this Guide is the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics Defense Systems, Systems Engineering, Enterprise Development (OUSD(AT&L) DS/SE/ED). This office will develop and coordinate updates to the Guide as required, based on policy changes and customer feedback. To provide feedback to the OPR, please e-mail the office at [ATL-ED@osd.mil](mailto:ATL-ED@osd.mil).

## 2.0 General Guidelines and Submittal Instructions

Appropriate links are included throughout this Guide to more specific guidance found elsewhere or in the *Defense Acquisition Guidebook* (DAG). The DAG references are made using the following format: {Ref DAG, Sect 4.1}. This formatting example indicates a reference to *Defense Acquisition Guidebook*, Chapter 4, *Systems Engineering*, Section 4.1, *Systems Engineering in DoD Acquisition*. In addition, links are included to the Support Guide, [Designing and Assessing Supportability in DoD Weapon Systems: A Guide to Increased Reliability and Reduced Logistics Footprint](#), using the abbreviation SUP GDE.

### 2.1 General Guidelines

The SEP is the blueprint for the conduct, management, and control of the technical aspects of an acquisition program from conception to disposal, i.e., how the systems engineering process is applied and tailored to meet each acquisition phase objectives. The process of planning, developing, and coordinating systems engineering and technical management forces thoughtful consideration, debate, and decisions to produce a sound systems engineering strategy for a program commensurate with the program's technical issues, life cycle phase, and overall objectives. Thus, the SEP, reflecting that planning, should be tailored to the specifics of the

program. The SEP should contain adequate description of the program to determine proper tailoring.

The SEP is the one document that defines the methods by which all system requirements having technical content, technical staffing, and technical management are to be implemented on a program, addressing the government and all contractor technical efforts {[Ref DAG Sect 4.2.3.2](#)}. The SEP is the Program Manager's plan, but is often jointly developed by the government and its contractor(s). The planning documented in the SEP should answer a series of critical questions:

- What are the system capabilities, requirements (including statutory, regulatory, and certifications), and associated design considerations to be addressed, hereafter collectively referred to as "Requirements?"
- What is the organizational integration necessary to address these Requirements, defining the systems engineering organization and infrastructure needed to include staffing, individual and organizational responsibilities and authorities, and training needs?
- What is the engineering effort required, work products required, and schedule to achieve the Requirements?
- How will the technical effort be managed and by whom, including technical baseline implementation and control and technical reviews planned to include what metrics, event-driven entry criteria, and exit criteria will be used?
- How will the SEP link with other technical and programmatic planning efforts (e.g., the program acquisition strategy, Test and Evaluation (T&E) Strategy (TES), and Test and Evaluation Master Plan (TEMP), risk management, contract management, and financial management)?

These items convey the core information needed to understand the technical approach planned for a program. The technical approach must answer:

- What are the technical issues and risks?
- Who has responsibility and authority for managing the technical issues and risks?
- What processes and tools will be used to address the technical issues and risks?
- How will that process be managed and controlled?
- How is that technical effort linked to the overall management of the program?

This is the preferred content of a SEP as described in further detail in Section 3.0

**Suggested Format and Specific Preparation Guidelines.** The SEP should complement and not duplicate other technical program documents, references and hyperlinks to other acquisition documents are highly recommended.

The SEP is updated as needed to reflect technical progress achieved to date in the program, and to reflect changes in the technical approach stemming from the findings and results of the program's technical reviews, program reviews, acquisition milestones, or other program decision points. It should include a discussion of how it will be updated. As a minimum, the SEP is submitted for Milestone Decision Authority (MDA) approval at each major program milestone.

## 2.2 Submittal and Approval Instructions

For ACAT ID and ACAT IAM programs, the SEP is submitted to the MDA:

- By the appropriate Component Acquisition Executive (CAE) or designated representative,
- Not later than 30 days prior to the milestone decision point or subsequent program initiation if a program manager must have an Office of the Secretary of Defense (OSD)-approved document by the decision date, and
- Through the appropriate OUSD(AT&L) Defense Systems, Systems Engineering, Assessments and Support (OUSD(AT&L) DS/SE/AS) Program Support Team Lead (PSTL), who will forward the SEP to the appropriate Overarching Integrated Product Team (OIPT) leader for endorsement to the MDA.

For non-ACAT ID or IAM programs, the component MDA will designate the SEP approval authority and prescribe submittal instructions.

## 3.0 Suggested Format and Specific Preparation Guidelines

This section provides the preferred format for the SEP title and coordination pages, suggested format of the SEP, and detailed instructions for each section of the SEP. The program team may tailor the SEP contents and coverage to the needs and complexity of the specific program, including the need to simply update existing legacy planning documents to the required content (e.g., Systems Engineering Management Plan (SEMP)); and in accordance with the direction of the MDA or designated SEP approval authority.

### 3.1 Title and Coordination Pages

Figures 1 and 2 illustrate the preferred title and coordination pages for an ACAT ID or ACAT IAM program. The minimum information to include on the title page is the program name, the version number of the document, what milestone this version supports, and the date. There is no prescribed title (i.e., SEP versus SEMP) or format version (you should provide a change log table so that reviewing authorities can understand the format adopted (see Section 3.3.3 Approach for SEP Updates)).

The coordination page should include the same information as the title page, followed by the signature blocks for the submitting officials, the concurrence officials at the program executive office or equivalent level, the component approving level, and OSD concurrence, as shown in Figure 2. This coordination page should be tailored based on the approved reporting chain directed by the MDA.

For all other ACAT programs, components may adapt these pages in accordance with component MDA or designated SEP approval authority direction. The Services have published further systems engineering policy regarding SEPs that should be referenced:

- [June 6, 2005, ASN \(RD&A\) Memorandum, “Policy for DoN Systems Engineering Plan \(SEP\) Review and Approval”](#)
- [June 13, 2005, ASA\(ALT\) Memorandum, “Army Systems Engineering Policy”](#)
- [October 7, 2005, SAF/AQ Memorandum, “Air Force Systems Engineering Policy”, Attachment 1 and Attachment 2](#)

<p>PROGRAM NAME</p> <p>SYSTEMS ENGINEERING PLAN (SEP)</p> <p>VERSION</p> <p>MILESTONE SUPPORTING</p> <p>DATE</p> <p>*****</p> <p>OSD APPROVAL</p> <table border="0"> <tr> <td> <p>_____</p> <p>Milestone Decision Authority or Designated SEP Approval Authority</p> </td> <td> <p>_____</p> <p>DATE</p> </td> </tr> </table>	<p>_____</p> <p>Milestone Decision Authority or Designated SEP Approval Authority</p>	<p>_____</p> <p>DATE</p>
<p>_____</p> <p>Milestone Decision Authority or Designated SEP Approval Authority</p>	<p>_____</p> <p>DATE</p>	

**Figure 1 Preferred SEP Title Page**

SYSTEMS ENGINEERING PLAN (SEP) FOR THE PROGRAM NAME			
VERSION			
MILESTONE SUPPORTING			
DATE			
*****			
<u>SUBMITTED BY</u>			
_____ Lead or Chief Systems Engineer PROGRAM NAME	_____ DATE	_____ Program Manager PROGRAM NAME	_____ DATE
<u>CONCURRENCE</u>			
_____ Lead or Chief Systems Engineer PEO or Equivalent NAME	_____ DATE	_____ PEO or Equivalent PEO or Equivalent NAME	_____ DATE
<u>COMPONENT APPROVAL</u>			
_____ Component Acquisition Executive or Milestone Decision Authority			_____ DATE

**Figure 2 Preferred SEP Coordination Page**

### 3.2 Table of Contents

A suggested, tailorable format for the SEP is shown in Figure 3.

Title and Coordination Pages
Table of Contents
1. Introduction
1.1 Program Description and Applicable Documents
1.2 Program Technical Status as of Date of This SEP
1.3 Approach for SEP Updates
2. Systems Engineering Application to Life Cycle Phases
2.1 System Capabilities, Requirements, and Design Considerations
• Capabilities to be Achieved
• Key Performance Parameters
• Statutory and Regulatory Requirements
• Certification Requirements
• Design Considerations
2.2 SE Organizational Integration and Technical Authority
• Organization of IPTs
• Organizational Responsibilities
• Integration of SE into Program IPTs
• Technical Staffing and Hiring Plan
2.3 Systems Engineering Process
• Process Selection
• Process Improvement
• Tools and Resources
• Approach for Trades
2.4 Technical Management and Control
• Technical Baseline Management and Control (Strategy and Approach)
• Technical Review Plan (Strategy and Approach)
2.5 Integration with Overall Program Management Control Efforts
• Acquisition Strategy
• Risk Management
• Integrated Master Plan
• Earned Value Management
• Contract Management

**Figure 3 Suggested SEP Format**

### 3.3 Introduction

The introductory section of the SEP should convey the essential elements of the program—system description, referencing other applicable major program documents and the hierarchy of those documents; program technical status at the time of SEP submittal; and the overall approach for updating the SEP.

#### 3.3.1 Program Description and Applicable Documents

This section provides a top-level system description and should convey the overall key aspects of the program. The system description should include any family-of-systems (FoS) or system-of-systems (SoS) relationships, as applicable {[Ref DAG Sect 4.2.6](#)}. If more detailed information is required, incorporate it by referencing the documents that contain the information by, to the extent practicable, referencing the section and pages. Every effort should be made to reference existing program documentation within the SEP. This section should summarize and refer to other program documents, as appropriate (e.g., program Initial Capabilities Document (ICD), Capability Development Document (CDD), or Capability Production Document (CPD); Acquisition Strategy; Technology Development Strategy (TDS); Integrated Master Plan (IMP) and Integrated Master Schedule (IMS), including the schedule for contractor, developmental, and operational testing; and the TES or TEMP, as appropriate, for the current phase of the program). For FoS or SoS programs, related SEPs, overarching or subordinate, should also be cross-referenced. This section should also provide the hierarchy of these documents and list the point of contact for each. When other program documents are included in the technical planning by reference in the SEP, they must be made available to the SEP review and approval authority.

#### 3.3.2 Program Technical Status as of Date of the SEP

This description includes the program's technical status as of date of the SEP to include current life-cycle phase, past milestones achieved, critical path identification and tracking events, open hazards, and upcoming major milestones. This section provides an update rather than replacement of status previously provided. The description should include status of deliverables or key events required by other programs in order to field and sustain a complete, FoS or SoS mission capability, if applicable.

#### 3.3.3 Approach for SEP Updates

This section describes the approach for updating the SEP, which is a “living document.” The description should list the primary sources and event triggers for SEP updates {[Ref DAG Sect 4.5.1](#)}, list previous SEP submittals by date, and include a change log table.

### 3.4 Systems Engineering Application to Life Cycle Phases

This section should be broad in scope and as comprehensive as the program's maturity allows, describing the top-level, technical process for the system's upcoming life cycle phase (i.e., Concept Refinement, Technology Development, System Development and Demonstration (SDD), Production and Deployment, or Operations and Support (O&S)). The description should address the technical process approach for meeting individual acquisition phase objectives and supporting the technical and programmatic products required of each phase {[Ref DAG Sect 4.3](#)}. The content of the SEP will vary, depending on the program's acquisition phase. The following

sections describe, in general terms, what should be included in each section of the SEP. Appendix A contains additional information in the form of focus areas for technical planning for programs during Concept Refinement/Technology Development, SDD, and the Operations and Support phases. Appendix A should be used as a guide to tailor the specific topics to cover in each section of the SEP.

The plan should summarize what has been achieved to date and describe what is planned for the future with more detail provided on the next immediate life cycle phase than subsequent phases. In subsequent revisions, any changes to the prior SEP and planned events, etc., should include a brief explanation of what drove the change (e.g., new direction or requirements, funding issues, technical issues, or normal program maturation, etc.).

### **3.4.1 System Capabilities, Requirements, and Design Considerations**

This section outlines the overall capabilities, concept(s) of operation, and Requirements of the program, as appropriate. This section provides the reader a basic understanding of the problem at hand by describing the totality of the system's technical requirements as they are known on the date of the SEP. The minimum information to convey is:

- Capability required and operational concept (if appropriate, the Joint Requirements Oversight Council (JROC)-approved Concept of Operations), referencing the appropriate Joint Capabilities and Integration Development System (JCIDS) documents (e.g., ICD, CDD, or CPD) {Ref [CJCSM 3170.01E](#) and [DAG Sect 4.1.3](#)};
- The Key Performance Parameters (KPPs) and the rationale and basis for the KPPs {Ref [CJCSM 3170.01E](#)};
- Statutory and Regulatory Requirements: describe the statutory and regulatory requirements that apply to the program and the plan for achieving those requirements, including the applicable approving authority;
- Certification Requirements: describe the mandatory certification requirements levied on the program at each level of development (i.e., element, system, integration, interoperability, joint, and coalition), including the applicable source for the certification requirement (e.g., statute, regulation, or instruction); and
- Design considerations: for any special design considerations that must be integrated into the engineering design effort, describe the basis and how the technical authority is going to be engaged {[Ref DAG, Sect 4.4](#)}. This includes the requirements and technical approach for optimizing system operational effectiveness through balancing system performance, system availability, process efficiency, and total ownership costs {Ref DAG, Sects [5.1.3.5](#), [5.2.2](#), and [5.4.2.1](#) and [SUP GDE, Sects 1.3, 2.0 \(et seq.\), and 3.2.1](#)}.

### **3.4.2 Systems Engineering Organizational Integration and Technical Authority**

This section delineates how the technical effort will be integrated organizationally to accommodate the appropriate technical authorities and engineering specialties commensurate with the Requirements of the program as outlined in Section [3.4.1 System Capabilities, Requirements, and Design Considerations](#) above {[Ref DAG Sect 4.1.6](#)}. This includes a plan for organizational structure and staffing and the responsibilities for technical management, systems

engineering, T&E, and sustaining engineering to include any hiring implications and additional training requirements.

This section of the plan should include:

- The overall organization of the technical effort, including delineation of authorities, responsibilities, and integration across the government and contractor boundaries from prime contractor to the lowest level supplier;
- The authorities and role of the chief or lead systems engineer and systems engineering teams (e.g., the Systems Engineering and Integration Team or IPTs);
- The staffing levels, training, and experience needed to execute the required technical effort;
- How the systems engineering structure is organized to provide technical management guidance across the government, prime contractor, subcontractors, and suppliers;
- How technical authority will be implemented on the program to address the full spectrum of program Requirements outlined in Section 3.4.1 System Capabilities, Requirements, and Design Considerations. Technical authority is the inherently governmental authority, responsibility, and accountability to establish, monitor, and approve technical standards, tools, and processes; and
- For FoS and SoS efforts, how the program-level technical standards are approved and integrated with higher-level technical authorities.

### 3.4.3 Systems Engineering Process

This section should delineate the technical process to be used on the program, including the basis for selection (e.g., commercial standard, organizational process, etc.), the purpose and objectives of the process {Ref DAG Sects 4.2.3 and 4.2.4}, and the technical authority responsible for implementation (e.g., who is responsible for airworthiness certification). The plan should address any planned process improvement activities as well as the program's approach to ensuring adherence to established processes. This section should identify those approaches previously enacted that have not been successful and what changes are being put in place, as of this update, to improve the approach.

The plan should discuss how the size, effort, and schedule for the technical effort are developed, and how it is adequate to allow for disciplined application of the planned systems engineering process. It should also include the method of resource allocation to technical tasks to include resource-requirements identification, procedures for resource control, and reallocation procedures to include:

- Analysis tools used to conduct design trades and studies appropriate for the phase of the program (i.e., Concept Refinement, Technology Development, System Development and Demonstration (SDD), Production and Deployment, or Operations and Support (O&S)),
- Facilities and tools employed for each process and phase (for new facilities providing a facility development plan to include any facility software development),
- Facilities and tools employed by systems engineering personnel, and
- Integration of tools between functions and between organizations.

Briefly provide an overview of the key technical objectives, deliverables and results from the process, needed process inputs, and the product work breakdown structure (WBS) development. The description should also include an overview of the TES or TEMP, demonstrating how the T&E strategy meshes with the technical efforts, and the overall program T&E schedule to include platform-level, interoperability, joint, and coalition test and certification, as applicable.

This section should describe the program's intended use of modeling and simulation (M&S) and other analysis tools to facilitate the systems engineering process throughout the system's life cycle. It should specifically address M&S application during concept refinement {[Ref DAG Sect 4.5.7.1](#)}, development {[Ref DAG Sects 4.5.7.2](#) and [4.5.7.3](#)}, testing {[Ref DAG Sect 4.5.7.3](#)}, production {[Ref DAG Sect 4.5.7.4](#)}, and O&S {[Ref DAG Sect 4.5.7.5](#)}, as appropriate for the current and pending phases of the program's life cycle. The plan should include the program's strategy for managing the M&S activities for optimum cost-effectiveness and describe how the program will avoid duplication of efforts by reusing M&S resources. This section should also address M&S and other analysis tool procurement, development, maintenance, data management, verification, validation, and accreditation.

This section should describe what studies have been and will be conducted, who did or will conduct them, how they were or are to be conducted to include a discussion of trades as part of a FoS or SoS solution, if applicable {[Ref DAG Sect 4.3](#)}, and who is responsible for making trade-off decisions and at what level in the organization that decision maker resides. Further, it should describe the intended use of criteria for decision-making and trade-off of alternative design solutions, including a description of technical objectives, criteria and weighting factors, and utility curves, as applicable.

Early in a program's life cycle, this description should include an overview of the approach and methods planned for use in arriving at a balanced set of requirements and a balanced functional and design architecture to satisfy those requirements. It should also describe what mission analysis techniques (e.g., M&S) are planned for use in the Analysis of Alternatives (AoA) and how that supports the evolution of requirements in the ICD, CDD, and CPD.

The plan should also provide an overview of the methods and tools specific systems analyses needed (e.g., hardware, software, ESOH hazard analyses and risk assessments, human allocation, trade-off analyses, systems and cost effectiveness, cost benefit, and risk impact analyses). It should describe the studies planned for making trades among:

- Stated requirements;
- Design;
- Project schedule;
- Functional and performance requirements;
- Function;
- Task; and
- Decision allocation among human, software, and hardware and life cycle and design to cost.

Cost realism and schedule realism are important factors that should be evident. For programs later in the life cycle, include the approach for progressing through the typical systems engineering steps: requirements analysis, decomposition, allocation, and analysis. The

description should summarize prior trade studies and how they have steered the technical and programmatic changes to the program.

The plan should include the intended measures of effectiveness (MOEs), how they interrelate, and criteria for the selection of measures of performance (MOPs) to support the evolving definition and verification of the system. The description should include the overall approach for all planned analyses (e.g., system cost-effectiveness, manufacturing, verification, distribution, operational, human engineering, manpower, personnel, training, usability, reliability, supportability, safety, health analyses hazards, environmental, and life cycle cost analysis). Finally, it should describe when and how the analytical results are integrated and the criteria used; rationale for the solution; evaluation of ESOH hazards, mitigation and/or associated formal risk acceptance; and how performance requirements, life cycle costs, etc, will be considered.

### **3.4.4 Technical Management and Control**

This section describes the approach for controlling the overall technical effort of the program, including the technical baseline control and requirements management, traceability, and requirements verification; and event-driven technical reviews.

It should delineate who has the responsibility for technical baseline management and control and how the generation of specifications and baselines will be managed and controlled. This section should identify, by name, the specification documents that require development and those which currently exist as legacy requirements and specifications {Ref DAG Sects [4.2.3.6](#), [4.2.3.7](#), and [4.2.3.8](#)}. If appropriate, the description should include the approach for documenting and controlling baselines developed as part of a FoS or SoS solution.

The plan should include:

- How each technical baseline is developed, managed, and used to control system requirements, design, integration, verification, and validation to include change control strategy for baselines and configurations and specific products that constitute the technical baseline;
- The technical objectives related to success of the project, system, and system operational effectiveness (e.g., software development metrics; technical performance measures (TPMs); Critical Technical Parameters (CTPs); MOEs; measures of suitability (MOSS); MOPs; and system performance and system availability parameters (i.e., reliability, maintainability, supportability, and producibility) {Ref DAG Sects [5.1.3.5](#), [5.2.2](#), and [5.4.2.1](#) and [SUP GDE, Sect 2.2](#)}) that indicate technical progress, design maturity, safety, and achievement of performance and technical objectives (include system or configuration item parameters or both) and a discussion of technical performance measurement update frequency, tracking depth, response time to generate recovery plans and planned profile revisions, and the risks related to parameter descriptions;
- The approach for requirements traceability and requirements verification and validation traceability, describing the tools and methods that were or will be used to show traceability of TPMs to the KPPs and between JCIDS requirements documents

- (ICD, CDD, or CPD) and system performance specifications (e.g., Prime Item Development Specification or Commercial Item Description, etc.);
- The continual and accurate identification and management of the critical path tasks;
- The planned achievement-to-date assessments to support cost reporting and event-driven schedule; and
- Overview of government and contractor data rights for the system to include what key technical information and data (capabilities, concept descriptions, system concepts definitions, operational and support requirements, performance requirements, KPPs, concept of operations) will be developed during this phase.

This section should also describe the approach and strategy for implementing event-driven technical reviews, and address how the overall review process demonstrates completion of required accomplishments by satisfying criteria in an event-driven schedule {Ref DAG Sects [4.2.3.3](#), [4.3](#), [4.3.1.4](#), [4.3.2.4](#), [4.3.3.4](#), [4.3.3.9](#), [4.3.4.4](#), [4.3.5.4](#), [4.4.11.2](#), [4.5.1](#), [4.5.3](#), and [4.5.8](#)}. The overall technical review approach selected is tailorable based on the complexity of the program. The key information to convey in this section is how the lead or chief systems engineer will use each technical review to formalize assessed technical maturity, assess risks {Ref DAG Sects [4.2.3.5](#) and [11.4](#)}, and support program decisions at the overall system level and down to configuration items of the system. The plan should describe how technical reviews will enable an independent assessment of emerging designs against the plans in order to demonstrate and confirm completion of required accomplishments and readiness to proceed to the next key milestone. This is especially important for evolutionary acquisition strategies, using spiral development processes, or multi-component programs (FoS or SoS programs). The technical review approach should be integrated across the government, contractor, and lowest level of supplier.

This section should address contractual, workforce, and schedule resources required to adequately implement the technical review process. The description should include:

- The technical review membership composition, including the method for nominating and approving the chairperson and membership {[Ref DAG Sect 4.1.6](#)};
- The roles and responsibilities of those involved in conducting technical reviews, and outline the procedures they will use in conducting and closing out outstanding issues of the reviews;
- The number of technical reviews planned, to what WBS-level;
- The program specific entry and exit criteria for each review;
- The timing of each review; and
- How technical reviews are used to manage the technical effort.

### **3.4.5 Integration with Overall Program Management Control Efforts**

This section describes the relationship and feedback mechanisms between the systems engineering and key program management processes that are closely interrelated: acquisition strategy; risk management; program management plan or integrated master plan (IMP) and integrated master schedule (IMS); earned value management system (EVMS); and contract management. This section should describe:

- How the program's selected acquisition strategy is based on the technical understanding of the problem at hand and the identified program risks to include the list of program risks {Ref DAG Sects [4.0](#) and [4.3](#)};
- What are the linkages between the technical risk assessment and mitigation efforts and the overall risk management process {Ref DAG Sects [4.2.3.5](#) and [11.4](#)};
- What is the integration of technical activities into the overall program management effort through the program management plan or IMP and IMS {[Ref DAG Sect 11.3](#)};
- What technical efforts are included in the EVMS measurement baseline and how earned value is mapped to the technical reviews {[Ref DAG Sec 11.3.1](#)}; and
- How the technical data and decisions feed other program activities and vice versa.

This section should also describe how the contract, subcontract, and supplier, if applicable, technical efforts are managed. This plan should include:

- How sources will be selected {[Ref DAG Sect 4.2.5](#)};
- What is the approach for contractor award fees and performance incentives;
- What are the contracting strategies for incentivizing industry-to-industry to include associated contractor agreements (ACA) and award fee considerations and how performance incentives are linked or inter-related to optimize top-level system performance; and
- What are the contracting strategies for incentivizing the contractor to design for optimum materiel readiness at minimum life-cycle cost (e.g., design for reliability and maintainability, or design for corrosion resistance).

## APPENDIX A. FOCUS AREAS FOR TECHNICAL PLANNING

The following focus areas for Concept Refinement/Technology Development, SDD/Production and Deployment, and Sustainment phases were developed to aid in a program's technical planning and are also used to evaluate a program's technical planning as documented in the program's SEP.

### SEP Focus Areas for Technical Planning – Concept Refinement/Technology Development

**KEY:** DAG=*Defense Acquisition Guidebook*; SUP GDE=[Designing and Assessing Supportability in DoD Weapon Systems: A Guide to Increased Reliability and Reduced Logistics Footprint](#); and SEP PG=*Systems Engineering Plan Preparation Guide, Version 1.0*

SEP Five Focus Areas	References		
	DAG	SUP GDE	SEP PG
<b>A. Program Requirements</b>			
1. How well does the technical approach reflect the program team's understanding of the user's desired capabilities, concept(s) of operation and support, and required attributes (with their appropriate measures of effectiveness)?	4.1.3; 4.2.4.1; 4.3.1; 4.3.2 (et seq.)	1.3.1; 2.2.1; 3.1; 3.2; 3.3	3.4.1
2. How well does the technical approach reflect the program team's understanding of the requirements driving the preferred system concept, including: potential statutory and regulatory requirements, derived requirements, certification requirements, supportability requirements, training requirements, life-cycle cost requirements, and other design considerations and constraints?	3.2.1; 4.1.3; 4.2.3.1; 4.2.4.1; 4.3.1; 4.3.2 (et seq.); 4.4.11	3.2; 3.3	3.4.1
3. How well does the technical approach reflect the program team's understanding of the preferred system concept's enabling technologies, relative risk of these technologies, and technology maturation required?	4.2.3.1; 4.2.4.1; 4.3.1; 4.3.2 (et seq.)	3.2; 3.2.1; 3.3	3.4.1
4. How well does the technical approach reflect the program team's understanding of the cost and schedule constraints on the program and how these relate to the level of technology maturation required?	3.2.1; 4.2.4.1; 4.3.1; 4.3.2	3.3	3.4.1
5. How well does the technical approach reflect the program team's understanding of how success or failure of technology development and understanding of the linkage between overall operational	4.2.4.1; 4.3.2; 4.4; 5.1.3.5; 5.2.2;	1.3; 2.0 (et seq.); 3.2.1	3.4.1

effectiveness, weapon system performance, and execution of an effective product support strategy will be factored into and reflected in the program's acquisition strategy, program goals, and planning for future phases (i.e., SDD)?	<b>5.4.2.1</b>		
<b>B. Technical Staffing and Organization Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach describe how technical authority will be implemented on the program to address all elements of the technology development effort across all elements of the preferred system concept (operational, support, training)?	<b>4.1.6</b>		<b>3.4.2</b>
2. How well does the technical approach describe the authorities and role of the lead or chief systems engineer and systems engineering on the technology development IPTs?	<b>4.1.2; 4.1.6; 4.2.3</b>		<b>3.4.2</b>
3. How well does the technical approach describe how technical activities will be integrated within and coordinated across IPTs to include higher-level technical authorities for FoS and SoS programs, if applicable?	<b>4.1.2; 4.1.5; 4.1.6; 4.2.6</b>		<b>3.4.2</b>
4. How well does the technical approach describe how IPTs will be organized, and their resources, staffing, management metrics, integration mechanisms, staff training needs, and responsibilities relative to technology development and requirements maturation efforts?	<b>4.1.5; 4.1.5; 4.1.6</b>		<b>3.4.2</b>
5. How well does the technical approach address overall organization of Government and contractor (if applicable) technical tasks, activities, and responsibilities (requirements, technical baseline, technical reviews, etc.)?	<b>4.1.6</b>	<b>3.3</b>	<b>3.4.2</b>
<b>C. Technology Maturation and Technical Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach describe who will be responsible for managing the capabilities requirements, preliminary system specification, and system concept as they are matured during Technology Development?	<b>4.1.6</b>		<b>3.4.4</b>
2. How well does the technical approach describe a plan for how the system concept's technical baseline will be defined and managed during Technology Development?	<b>4.2.3 (et seq.)</b>		<b>3.4.4</b>

3. How well does the technical baseline approach account for requirements traceability and requirements verification across the preferred system concept's technical requirements?	4.2.3 (et seq.); 4.2.4 (et seq.)		3.4.4
4. How well does the technical baseline map the user's materiel recommendation(s) and key boundary conditions (ICD to draft CDD) into the preferred system concept?	4.2.3 (et seq.)		3.4.4
5. How well does the technical approach describe how the technical baseline and results of technology demonstrations are used to assess technical maturity and risk?	4.2.3 (et seq.); 4.3.1 (et seq.); 4.3.2		3.4.4
<b>D. Technical Review Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach detail what event-driven technical reviews will be conducted at a system, subsystem, and critical technology level, as appropriate. Program specific entry and exit criteria defined and documented for each technical review?	4.2.3.3; 4.3.1.4 4.3.2.4; 4.5.1; 4.5.8		3.4.4
2. How well does the technical approach describe who is responsible for overall management of each technical review to be conducted on the program?	4.1.6; 4.3.1.4; 4.3.2.4		3.4.4
3. How well does the technical approach describe how technical authority is being accessed and applied to independently chair each of the technical reviews?	4.2.3.3; 4.3.1.4; 4.3.2.4; 4.5.1; 4.5.8		3.4.4
4. How well does the technical approach detail, for each review (potentially system, subsystem, critical technology), what stakeholders are to be involved given the preferred system concept, the statutory, regulatory and certification requirements, and the design and support considerations derived from them?	4.2.3.3; 4.3.1.4; 4.3.2.4; 4.4.11; 4.5.1; 4.5.8		3.4.4
5. How well does the technical approach detail how the program will identify peer (independent subject matter experts) review participants in each of the technical reviews?	4.2.3.3; 4.3.1.4; 4.3.2.4; 4.5.1; 4.5.8		3.4.4
<b>E. Integration with Overall Management of the Program</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach integrate across technology development, requirements maturation, and	4.5.2; 4.5.3;		3.4.5

overall program management planning and control efforts, such as identification of critical path, integrated master planning and the program's integrated master schedule?	<b>11.3; 11.3.1</b>		
2. How well does the technical approach describe how the program manager, or equivalent, uses critical path and technical reviews to manage the technical effort?	<b>4.1.6; 4.3.1.4; 4.3.2.4</b>		<b>3.4.5</b>
3. How well does the technical approach integrate with the program's risk reduction effort (e.g., does the SEP detail how the technical reviews provide a technical risk assessment input to the risk assessment process)?	<b>4.2.3.5; 4.3.1.4; 4.3.2.4; 11.4</b>		<b>3.4.5</b>
4. How well does the technical approach integrate the test and evaluation strategy and the product support strategy into the overall technical approach?	<b>4.1.3; 4.2.4.6; 4.2.4.7; Ch 9, T&amp;E; Ch 5, Log</b>	<b>1.3.1; 3.3</b>	<b>3.4.5</b>
5. How well does the technical approach address contracting considerations for systems engineering?	<b>4.2.5</b>		<b>3.4.5</b>

## SEP Focus Areas for Technical Planning in SDD/Production and Deployment

**KEY:** DAG=*Defense Acquisition Guidebook*; SUP GDE=[Designing and Assessing Supportability in DoD Weapon Systems: A Guide to Increased Reliability and Reduced Logistics Footprint](#); and SEP PG=*Systems Engineering Plan Preparation Guide*, Version 1.0

SEP Five Focus Areas		References		
A. Program Requirements		DAG	SUP GDE	SEP PG
1.	How well does the technical approach reflect the program team's understanding of the program's desired capabilities, concept(s) of operation, and key performance parameters (KPPs) for the program?	4.1.3; 4.2.4.1	3.4; 3.5	3.4.1
2.	How well does the technical approach reflect the program team's understanding of the program's statutory and regulatory requirements applicable to the program?	4.2.4.1; 4.4.11.2	3.4	3.4.1
3.	How well does the technical approach reflect the program team's understanding of the program's specification performance requirements, both specified and derived?	4.2.4.1	3.4; 3.5	3.4.1
4.	How well does the technical approach reflect the program team's understanding of the program's certification requirements applicable to the program?	4.2.4.1	3.5	3.4.1
5.	How well does the technical approach reflect the program team's understanding of the program's design considerations and understanding of the linkage between overall operational effectiveness, weapon system performance, and execution of an effective product support strategy?	4.2.4.1; 4.4; 5.1.3.5; 5.2.2; 5.4.2.1	1.3; 2.0 (et seq.); 3.4	3.4.1
B. Technical Staffing and Organization Planning		DAG	SUP GDE	SEP PG
1.	How well does the technical approach describe how technical authority will be implemented on the program to address the full spectrum of program requirements?	4.1.6; 4.4.11		3.4.2
2.	How well does the technical approach describe the authorities and role of the lead or chief systems engineer and systems engineering teams?	4.1.2; 4.1.6; 4.4.11		3.4.2
3.	How well does the technical approach describe how technical activities will be integrated within and coordinated across IPTs to include peer programs and higher-level technical authorities for FoS and SoS	4.1.2; 4.1.6; 4.2.6; 4.4.11		3.4.2

programs, if applicable?			
4. How well does the technical approach describe how IPTs will be organized, and their resources, staffing, management metrics, integration mechanisms, staff training needs, and responsibilities relative to the technical baseline products?	4.1.5; 4.1.6		3.4.2
5. How well does the technical approach address overall organization of Government and contractor technical tasks, activities, and responsibilities (requirements, technical baseline, technical reviews, etc) from prime contractor down to lowest level supplier?	4.1.6	3.4; 3.5	3.4.2
<b>C. Technical Baseline Management Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach describe who is responsible for managing the technical baselines?	4.1.6		3.4.4
2. How well does the technical approach describe a plan for how the system's technical baseline will be defined and managed?	4.2.3.6; 4.2.3.7; 4.2.3.8		3.4.4
3. How well does the technical baseline approach account for requirements traceability and requirements verification across all of the program's technical requirements?	4.2.3.4; 4.2.3.6; 4.2.3.7; 4.2.3.8; 4.2.4.1; 4.2.4.6; 4.4.11.2		3.4.4
4. How well does the technical baseline map across the entire specification tree (CDD to build-to documents) and across the entire work breakdown structure (WBS)?	4.2.3.6; 4.2.3.7; 4.2.3.8		3.4.4
5. How well does the technical approach describe how the technical baseline is used to assess technical maturity and risk?			3.4.4
<b>D. Technical Review Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach detail what event-driven technical reviews will be conducted at a system, subsystem, and configuration item level; are entry and exit criteria defined and documented; the planned schedule for technical reviews; and is the approval of the technical baselines a product of the appropriate review?	4.2.3.3; 4.3; 4.3.3.4; 4.3.3.9; 4.5.1; 4.5.8		3.4.4
2. How well does the technical approach describe who is responsible for overall management of the technical	4.1.6		3.4.4

reviews to be conducted on the program?			
3. How well does the technical approach describe how technical authority is being accessed and applied to chair each of the technical reviews?	4.2.3.3; 4.3; 4.3.3.4; 4.3.3.9; 4.5.1; 4.5.8		3.4.4
4. How well does the technical approach detail, for each review (system, subsystem, and configuration item), what stakeholders are to be involved and are the stakeholders reflective of the totality of technical requirements, spanning KPPs, statutory, regulatory, certification requirements, and all design considerations (e.g., mass properties)?	4.2.3.3; 4.3; 4.3.3.4; 4.3.3.9; 4.4.11.2; 4.5.1; 4.5.8		3.4.4
5. How well does the technical approach detail how the program will identify peer (independent subject matter experts) review participants in each of the technical reviews?	4.2.3.3; 4.3; 4.3.3.4; 4.3.3.9; 4.4.11; 4.5.1; 4.5.8		3.4.4
<b>E. Integration with Overall Management of the Program</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach integrate the technical approach with overall program management planning and control efforts such as integrated master planning, the program's integrated master schedule, and earned value management system?	4.4.11.1; 4.5.2; 4.5.3; 11.3; 11.3.1		3.4.5
2. How well does the technical approach describe how the program manager uses technical reviews to manage the technical effort?	4.1.6; 4.3.3.4; 4.3.3.9		3.4.5
3. How well does the technical approach integrate the technical approach with the program's risk management effort (e.g., does the SEP detail how the technical reviews provide a technical risk assessment input to the risk management process)?	4.2.3.5; 11.4		3.4.5
4. How well does the technical approach integrate test and logistics planning within the technical approach?	4.1.3; 4.2.4.6; 4.2.4.7; Ch 9, T&E; Ch 5, Log	3.4; 3.5	3.4.5

5. How well does the technical approach address contracting considerations for systems engineering?	<b>4.2.5</b>		<b>3.4.5</b>
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## SEP Focus Areas for Technical Planning in Sustainment

**KEY:** DAG=*Defense Acquisition Guidebook*; SUP GDE=[Designing and Assessing Supportability in DoD Weapon Systems: A Guide to Increased Reliability and Reduced Logistics Footprint](#); and SEP PG=*Systems Engineering Plan Preparation Guide, Version 1.0*

SEP Five Focus Areas	References		
A. Program Requirements	DAG	SUP GDE	SEP PG
1. How well does the technical approach reflect the technical surveillance approach to be applied during operations and support of the fielded system? (For example, for systems supported using Reliability Centered Maintenance (RCM), how well does the technical approach, data collection, and analysis methodology support periodic scheduled maintenance evolution?)	4.3.5; 5.1.3.7; 5.2.3; 5.3.1.12; 5.4.3.2	3.6; 3.7	3.4.4
2. How well does the technical approach reflect how the fielded system's actual usage and reliability will be tracked and assessed against planning assumptions made during design and development?	4.3.5.3.1; 5.2.3; 5.4.3.1; 5.4.3.2	3.7	3.4.3
3. How well does the technical approach reflect how in-service use (e.g., engineering and maintenance) data will be collected, triaged, analyzed, and assessed to determine and continuously monitor in-service system hazards and risks, integrity of critical safety items, materiel availability, system reliability, and maintenance of applicable systems certifications (airworthiness, SUBSAFE, etc)?	4.3.5; 4.5.7.5; 5.1.3.3		3.4.1; 3.4.3; 3.4.5
4. How well does the technical approach reflect the program's approach to tracking and control of system-driven O&S costs (e.g., reliability performance-to-plan), corrosion-related maintenance and repair costs, and total ownership costs?	4.3.5; 5.1.3.5; 5.3.1.11	2.2.6	3.4.5
5. How well does the technical approach reflect how requirements for in-service configuration changes will be determined, managed, and controlled? How well does the technical approach reflect how requirements against the in-service system will be translated as necessary to any follow-on system increments under consideration or development? How well does the technical approach	4.3.5; 4.3.5.4; 4.3.5.5; 4.2.3.6; 5.2.1.4; 5.4.3.1; 5.4.3.2	3.7; 3.8	3.4.4

consider key logistics criteria (e.g., system readiness requirements, product support)?			
<b>B. Technical Staffing and Organization Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach describe how technical authority will be implemented on the program to address the full spectrum of in-service technical surveillance needs?	<b>4.1.6; 4.3.5</b>	<b>2.2 (et seq.)</b>	<b>3.4.2</b>
2. How well does the technical approach describe the authorities and role of the lead or chief systems engineer and engineering support to the in-service support team?	<b>4.1.6; 4.3.5</b>		<b>3.4.2</b>
3. How well does the technical approach describe how sustaining engineering activities will be integrated within and coordinated across the operational, maintenance, and repair domains?	<b>4.3.5; 5.4.2; 5.4.3</b>	<b>2.2 (et seq.)</b>	<b>3.4.5</b>
4. How well does the technical approach describe how the sustaining support will be organized, and their resources, staffing, management metrics, integration mechanisms, staff training needs, and responsibilities relative to the fielded system technical baseline products?	<b>4.3.5</b>		<b>3.4.2</b>
5. How well does the technical approach address overall organization of Government and contractor sustaining engineering tasks, activities, and responsibilities (requirements, technical baseline, technical reviews, etc) down to, and including sub-suppliers?	<b>4.3.5</b>		<b>3.4.2</b>
<b>C. Technical Baseline Management Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach describe who is responsible for managing the technical baselines of the fielded system?	<b>4.1.6; 5.4.3</b>	<b>3.8</b>	<b>3.4.4</b>
2. How well does the technical approach describe a plan for how the fielded system's technical baseline will be defined and managed?	<b>5.4.3</b>	<b>3.8</b>	<b>3.4.4</b>
3. How well does the technical baseline approach account for requirements and certification traceability and requirements verification for any changes to the baseline, including critical safety items?	<b>4.2.4.1</b>		<b>3.4.3 3.4.4</b>
4. How well does the technical baseline surveillance map across the entire work breakdown structure (WBS)?	<b>4.2.4.1</b>		<b>3.4.4</b>
5. How well does the technical approach describe how the fielded system's operational hazard (e.g., reliability and safety) risk is continuously assessed against the technical baseline?	<b>4.3.5.3.6</b>		<b>3.4.4</b>

<b>D. Technical Review Planning</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach detail what periodic technical reviews will be conducted to coordinate the status of the fielded system's performance against operational, maintenance, and sustainment requirements?	4.3.4.4; 4.3.5.4; 5.2.3; 5.3.1.12; 5.4.3.1; 5.4.3.2	3.6; 3.7	3.4.4
2. How well does the technical approach describe who is responsible for overall management of the in-service technical reviews to be conducted on the fielded system?	4.1.6; 4.3.4.4; 4.3.5.4; 5.2.3; 5.3.1.12; 5.4.3.1; 5.4.3.2	3.6; 3.7	3.4.4
3. How well does the technical approach describe how technical authority is being accessed and applied to chair each of the in-service technical reviews?	4.1.6; 4.3.4.4; 4.3.5.4		3.4.2
4. How well does the technical approach detail, for the in-service review, what stakeholders are to be involved and are the stakeholders reflective of the totality (system, subsystem, and configuration item) of operational, maintenance, and sustainment requirements, spanning KPPs, statutory, regulatory, certification requirements, and all design considerations (e.g., realized reliability)?	4.3.4.4; 4.3.5.4		3.4.4
5. How well does the technical approach detail how the program will identify peer (independent subject matter experts) review participants in the in-service reviews?	4.1.6; 4.3.4.4; 4.3.5.4		3.4.4
<b>E. Integration with Overall Management of the Program</b>	<b>DAG</b>	<b>SUP GDE</b>	<b>SEP PG</b>
1. How well does the technical approach integrate the sustaining engineering approach with overall program management planning and control efforts for materiel readiness sustainment?	4.3.5; 5.1.1; 5.1.3; 5.1.3.7; 5.2.3	3.5; 3.6; 3.7	3.4.5
2. How well does the technical approach describe how the program manager will use the in-service reviews to manage both the technical effort and overall O&S cost containment?	4.3.5.4.1; 5.1.3.7; 5.2.3; 5.3.1.12; 5.4.3.1; 5.4.3.2	3.6; 3.7	3.4.4
3. How well does the technical approach integrate the sustaining engineering approach with the program's risk	4.3.5.3.6; 4.2.3.5		3.4.4

management effort (e.g., does the SEP detail how the in-service reviews provide a technical risk assessment input to the ongoing hazard risk assessment process)?			
4. How well does the technical approach integrate logistics support with the sustaining engineering approach?	<b>4.4.9; 5.1.1; 5.1.3</b>	<b>2.2 (et seq.); 3.6; 3.7</b>	<b>3.4.2; 3.4.4</b>
5. How well does the technical approach address contracting considerations for sustaining engineering?	<b>5.3 (et seq.)</b>		<b>3.4.2; 3.4.5</b>

## APPENDIX B. APPLICABLE REFERENCES

<a href="http://akss.dau.mil/dag/DoD5000.asp?view=document&amp;doc=1">DoDD 5000.1, <i>The Defense Acquisition System</i></a> <a href="http://akss.dau.mil/dag/DoD5000.asp?view=document&amp;doc=1">(http://akss.dau.mil/dag/DoD5000.asp?view=document&amp;doc=1)</a>
<a href="http://akss.dau.mil/dag/DoD5000.asp?view=document&amp;doc=2">DoDI 5000.2, <i>Operation of the Defense Acquisition System</i></a> <a href="http://akss.dau.mil/dag/DoD5000.asp?view=document&amp;doc=2">(http://akss.dau.mil/dag/DoD5000.asp?view=document&amp;doc=2)</a>
<a href="http://akss.dau.mil/dag/">Defense Acquisition Guidebook</a> <a href="http://akss.dau.mil/dag/">(http://akss.dau.mil/dag/)</a>
<a href="http://www.acq.osd.mil/ds/se/publications/pig/Policy%20for%20Systems%20Engineering%20in%20DoD.pdf">February 20, 2004, USD(AT&amp;L) Memorandum, “Policy for Systems Engineering in DoD”</a> <a href="http://www.acq.osd.mil/ds/se/publications/pig/Policy%20for%20Systems%20Engineering%20in%20DoD.pdf">(http://www.acq.osd.mil/ds/se/publications/pig/Policy for Systems Engineering in DoD - 20 Feb 04.pdf)</a>
<a href="http://www.acq.osd.mil/ds/se/publications/pig/Policy%20Addendum%20for%20Systems%20Engineering.pdf">October 22, 2004, USD(AT&amp;L) Memorandum, “Policy Addendum for Systems Engineering”</a> <a href="http://www.acq.osd.mil/ds/se/publications/pig/Policy%20Addendum%20for%20Systems%20Engineering.pdf">(http://www.acq.osd.mil/ds/se/publications/pig/Policy Addendum for Systems Engineering - 22 Oct 04.pdf)</a>
<a href="http://www.acq.osd.mil/ds/se/publications/pig/Implementing%20SE%20Plans%20in%20DoD%20-%20Interim%20Guidance%20-%202030%20Mar%202004.pdf">March 30, 2004, OUSD(AT&amp;L) Memorandum, “Implementing Systems Engineering Plans in DoD—Interim Guidance”</a> <a href="http://www.acq.osd.mil/ds/se/publications/pig/Implementing%20SE%20Plans%20in%20DoD%20-%20Interim%20Guidance%20-%202030%20Mar%202004.pdf">(http://www.acq.osd.mil/ds/se/publications/pig/Implementing% 20SE% 20Plans% 20In% 20D oD% 20-% 20Interim% 20Guidance% 20-% 2030% 20Mar% 2004.pdf)</a>
<a href="http://www.acq.osd.mil/pm/currentpolicy/wbs/MIL_HDBK-881A/MILHDBK881A/WebHelp3/MILHDBK881A.htm">MIL-HDBK-881A Work Breakdown Structure Handbook</a> <a href="http://www.acq.osd.mil/pm/currentpolicy/wbs/MIL_HDBK-881A/MILHDBK881A/WebHelp3/MILHDBK881A.htm">(http://www.acq.osd.mil/pm/currentpolicy/wbs/MIL_HDBK-881A/MILHDBK881A/WebHelp3/MILHDBK881A.htm)</a>
<a href="http://www.acq.osd.mil/pm/currentpolicy/cpr_cfsr/TMS%20Final%203-30-05.pdf">DI-MGMT-81650 Integrated Master Schedule (IMS) DID</a> <a href="http://www.acq.osd.mil/pm/currentpolicy/cpr_cfsr/TMS%20Final%203-30-05.pdf">(http://www.acq.osd.mil/pm/currentpolicy/cpr_cfsr/TMS% 20Final% 203-30-05.pdf)</a>
<a href="http://www.acq.osd.mil/pm/currentpolicy/cpr_cfsr/CPR%20Final%203-30-05.pdf">DI-MGMT-81466A Contract Performance Report (CPR) DID</a> <a href="http://www.acq.osd.mil/pm/currentpolicy/cpr_cfsr/CPR%20Final%203-30-05.pdf">(http://www.acq.osd.mil/pm/currentpolicy/cpr_cfsr/CPR% 20Final% 203-30-05.pdf)</a>
<a href="http://guidebook.dema.mil/79/guidebook_process.htm">Earned Value Management Implementation Guide (EVMIG)</a> [Scroll down the page that opens to EVM System Surveillance, Risk Planning, § 1.5 to find the link to the document.] <a href="http://guidebook.dema.mil/79/guidebook_process.htm">(http://guidebook.dema.mil/79/guidebook_process.htm)</a>
<a href="http://www.acq.osd.mil/log/lpp/file/FINAL_GUIDE_with_Memo_October_24.pdf">Designing and Assessing Supportability in DoD Weapon Systems: A Guide to Increased Reliability and Reduced Logistics Footprint</a> <a href="http://www.acq.osd.mil/log/lpp/file/FINAL_GUIDE_with_Memo_October_24.pdf">(http://www.acq.osd.mil/log/lpp/file/FINAL_GUIDE_with_Memo_October_24.pdf)</a>
<a href="http://www.acquisition.navy.mil/navyaos/content/view/full/4136">June 6, 2005, ASN (RD&amp;A) Memorandum, “Policy for DoN Systems Engineering Plan (SEP) Review and Approval”</a> <a href="http://www.acquisition.navy.mil/navyaos/content/view/full/4136">(http://www.acquisition.navy.mil/navyaos/content/view/full/4136)</a>
<a href="http://library.saalt.army.mil/archive/Memo/2005/Army%20Systems%20Engineering%20Policy.pdf">June 13, 2005, ASA(ALT) Memorandum, “Army Systems Engineering Policy”</a> <a href="http://library.saalt.army.mil/archive/Memo/2005/Army%20Systems%20Engineering%20Policy.pdf">(http://library.saalt.army.mil/archive/Memo/2005/Army% 20Systems% 20Engineering% 20Po licy.pdf)</a>
<a href="https://www.safaq.hq.af.mil/mil/policy/documents/AF_SE_Policy_Memo.pdf">October 7, 2005, SAF/AQ Memorandum, “Air Force Systems Engineering Policy”, Attachment 1 and Attachment 2</a> <a href="https://www.safaq.hq.af.mil/mil/policy/documents/AF_SE_Policy_Memo.pdf">(https://www.safaq.hq.af.mil/mil/policy/documents/AF SE Policy Memo.pdf;</a> <a href="https://www.safaq.hq.af.mil/mil/policy/documents/AF_SE_Policy_Atch_1.pdf">https://www.safaq.hq.af.mil/mil/policy/documents/AF SE Policy Atch 1.pdf;</a> <a href="https://www.safaq.hq.af.mil/mil/policy/documents/SEP_policy_Atch2.pdf">https://www.safaq.hq.af.mil/mil/policy/documents/SEP policy Atch2.pdf)</a>

## APPENDIX C. ACRONYMS

ACA	Associated Contractor Agreements
ACAT	Acquisition Category
AoA	Analysis of Alternatives
CAE	Component Acquisition Executive
CDD	Capability Development Document
CPD	Capability Production Document
CTP	Critical Technical Parameter
DAG	<i>Defense Acquisition Guidebook</i>
EVMS	Earned Value Management System
FoS	Family-of-Systems
ICD	Initial Capabilities Document
IMP	Integrated Master Plan
IMS	Integrated Master Schedule
IPT	Integrated Product Team
JCIDS	Joint Capabilities and Integration Development System
JROC	Joint Requirements Oversight Council
KPP	Key Performance Parameter
MDA	Milestone Decision Authority
M&S	Modeling and Simulation
MOE	Measure of Effectiveness
MOP	Measure of Performance
MOS	Measure of Suitability
OIPT	Overarching Integrated Product Team
OPR	Office of Primary Responsibility
OSD	Office of the Secretary of Defense
OUSD(AT&L)	Office of the Undersecretary of Defense for Acquisition, Technology, and Logistics
O&S	Operations and Support Phase
PEO	Program Executive Office or Program Executive Officer
PSTL	Program Support Team Lead
RCM	Reliability Centered Maintenance
SDD	System Development and Demonstration Phase
SEMP	Systems Engineering Management Plan
SEP	Systems Engineering Plan
SoS	System-of-Systems
TDS	Technology Development Strategy
TEMP	Test and Evaluation Master Plan
TES	Test and Evaluation Strategy
TPM	Technical Performance Measure
T&E	Test and Evaluation
USD(AT&L)	Undersecretary of Defense for Acquisition, Technology, and Logistics

WBS

Work Breakdown Structure